30

WHAT IS CLAIMED IS:

1	1.	A system comprising:		
2		a user interface adapted to collect data from a user;		
3		business logic configured to process data collected by the user interface; and		
4		an intermediate layer interposed between the user interface and the business logic and		
5	confi	configured to rearrange data collected by the user interface into a format that is optimized for		
6	proce	processing by the business logic.		
7				
8	2.	The system of claim 1 wherein the system is adapted to conduct a data flow between		
9	the user interface and the business logic through the intermediate layer.			
10				
11	3.	The system of claim 2 wherein the data flow is initiated by one or more actions of the		
12	user interface, wherein the one or more actions comprise any one of an opening of a user			
13	inter	face and an entering of data in the user interface.		
14				
15	4.	The system of claim 1 wherein the intermediate layer is further adapted to optimize		
16	the a	rrangement of data for the business logic, wherein the rearrangement of data collected		
17	by the user interface comprises data collection from the user interface and translating the			
18	collected data for the business logic.			
19				
20	5.	The system of claim 1 wherein the intermediate layer is configured to provide a		
21	buffering of data flow between the user interface and the business logic, wherein the			
22	buffering of data flow enables the system to perform batch processing of a plurality of			
23	business processes.			
24				
25	6.	The system of claim 1 wherein the business logic comprises a general business logic		
26	layer for common business functions and applications, wherein the intermediate layer is			
27	furth	er adapted to format the data for use in the general business logic layer.		
28				
29	7.	The system of claim 1 wherein the intermediate layer is adapted to perform one or		

31	by the business logic, wherein the one or more operations on the one or more objects		
32	comprise collecting and formatting one or more classes of objects.		
33			
34	8.	The system of claim 1 further comprising an object model controller to associate the	
35	data fr	om the user interface with an object, wherein the intermediate layer is adapted to	
36	receive	e the object from the object model controller.	
37			
38	9.	The system of claim 8 wherein the object model controller is adapted to send data	
39	reques	ts to the intermediate layer, wherein the data requests comprise any one of a read data	
40	request, a modify data request, and an insert data request, and wherein the object model		
41	contro	ller further comprises an object-oriented interface.	
42			
43	10.	The system of claim 1 further comprising a database adapted to receive data from the	
44	business logic and send data to the business logic, and wherein the system is adapted to send		
45	busine	ss logic data to the user interface through the intermediate layer.	
46			
47	11.	A method comprising:	
48		receiving data in a user interface;	
49		passing the data from the user interface to an intermediate layer, the intermediate	
50	layer being adapted to interact with the user interface and a layer of business logic;		
51		performing one or more operations on the data passed to the intermediate layer; and	
52		sending any one of data and instructions from the intermediate layer to the layer of	
53	business logic.		
54			
55	12.	The method of claim 11 further comprising:	
56		processing any one of the data and instructions in the layer of business logic; and	
57		sending any one of processed data and processed instructions from the layer of	
58	busines	ss logic to the user interface, wherein the sending of any one of processed data and	
59	process	sed instructions comprises passing the any one of processed data and processed	
60	instructions through the intermediate layer.		

logic.

89

90

62	13.	The method of claim 11 further comprising associating an object with the data			
63	recei	received in the user interface, wherein the intermediate layer is further adapted to perform			
64	one o	one or more operations on the object.			
65					
66	14.	The method of claim 13 wherein an object model controller associates an object with			
67	the da	ata received from the user interface, wherein the object model controller is configured to			
68	allow	a user to prevent other users from modifying data until a save data instruction is			
69	receiv	received in the user interface.			
70	•				
71	15.	The method of claim 14 wherein the intermediate layer is adapted to perform the			
72	follov	wing operations: receiving an instruction from the object model controller; performing			
73	one o	r more operations relating to the received instruction; and issuing one or more			
74		actions to the layer of business logic.			
75					
76	16.	The method of claim 15 wherein the intermediate layer determines whether the			
77	receiv	ved instruction from the object model controller comprises any one of a known object,			
78	an un	known object, or a modification of a known object.			
79					
80	17.	The method of claim 16 wherein, in response to the received instruction from the			
81	objec	t model controller, the intermediate layer is further adapted to perform any of the			
82	follov	following operations: instructing the layer of business logic to approve previous instructions			
83	and d	and data entries; instructing the layer of business logic to save data in a database; and			
84	initia	izing a framework to enable a user to perform data entry.			
85					
86	18.	The method of claim 11 further comprising:			
87		sending the data from the layer of business logic to a database; and			
88		saving the data in the database upon receiving the data from the layer of business			

91	19.	The method of claim 11 wherein the intermediate layer is adapted to optimize one or		
92	more	more processes in the layer of business logic, and wherein the intermediate layer enables		
93	batch	batch processing of data entered in the user interface.		
94				
95	20.	The method of claim 11 wherein the intermediate layer maintains data entries and		
96	modi	modifications among various object classes, and wherein the layer of business logic		
97	comp	comprises common business functions and applications.		
98				
99	21.	The method of claim 11 wherein a data flow between the user interface and the layer		
100	of bu	siness logic is initiated by one or more actions of the user interface, wherein the one or		
101	more actions of the user interface comprise any one of an opening of the user interface and a			
102	data e	entry in the user interface.		
103				
104	22.	An article comprising a machine-readable medium storing instructions operable to		
105	cause	a machine to perform operations comprising:		
106		receiving data in a user interface;		
107		passing the data from the user interface to an intermediate layer, the intermediate		
108	layer	being adapted to interact with the user interface and a layer of business logic;		
109		performing one or more operations on the data passed to the intermediate layer;		
110		sending any one of data and instructions from the intermediate layer to the layer of		
111	business logic;			
112		processing any one of the data and instructions in the layer of business logic; and		
113		sending any one of processed data and processed instructions from the layer of		
114	busin	ess logic to the user interface, wherein the sending of any one of processed data and		
115	proce	processed instructions comprises passing the any one of processed data and processed		
116	instru	instructions through the intermediate layer.		
117				
118	23.	A system comprising:		
119		a network of computers, wherein the network of computers comprises a database and		
120	at leas	st one user interface;		

16104-009001/2003P00802US

	a plurality of business logic adapted to perform a plurality of business functions and
aŗ	oplications, wherein the plurality of business logic is further adapted to process data entered
in	the at least one user interface, and wherein the plurality of business logic interacts with the
da	atabase; and
	an intermediate layer interacting with the at least one user interface and the plurality

an intermediate layer interacting with the at least one user interface and the plurality of business logic, wherein the intermediate layer is adapted to format and rearrange data entered in the user interface to optimize the processing of data in the plurality of business logic, and wherein a data flow between the at least one user interface and the plurality of business logic is conducted through the intermediate layer.